

Protect Personnel and Equipment Against Multiple Blast Loads

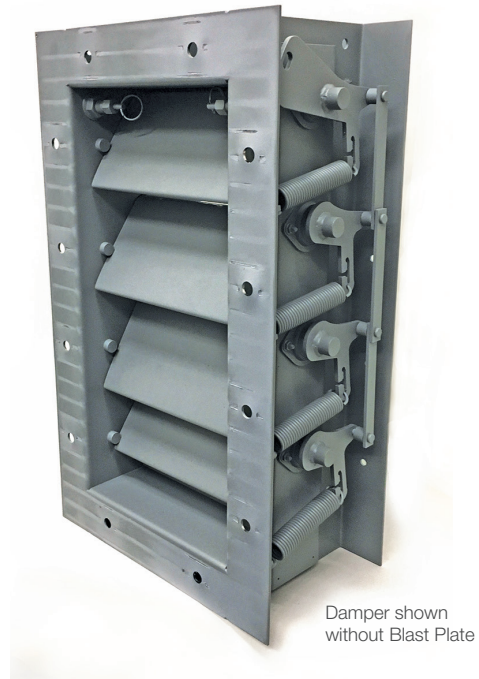
Install M.A.T. Blast Dampers to protect building air intake, exhaust and vent openings, and ensure your people and equipment are protected against potential blast loads.

The BL-201 series blast dampers, manufactured by M.A.T., are designed and tested to protect equipment and personnel against blasts and instantaneous pressure changes from industrial vapor cloud explosions and other disturbances. Blast protection up to 3 bar and multiple blast load protection up to 1 bar.

Typical applications are protection of air intake and exhaust openings and building vent openings. Typical building installations include control & instrumentation rooms and sub-stations on petrochemical facilities, power generation plants, military facilities, mining facilities, laboratories, and high risk government offices.

M.A.T. blast dampers can be surface mounted to exterior walls and roof structures or duct mounted.

The blast damper can be paired with M.A.T.'s BD-200-HD pressure relief damper to provide pressure relief in vent openings while limiting conditioned air loss, or in fire fighting applications to provide the required pressure relief during fire suppression system gas release.



Damper shown
without Blast Plate

BL-201 Series Blast Damper Features & Benefits

Performance & Features

- Blast pressures up to 3 bar
- Protection against multiple blast loads (see table on reverse)
- Resettable blade lock for protection against negative pressure phase and moving flame front (pictured on reverse)

Testing and Certification

- Third party tested at overpressures up to 1 bar
- Complies with UFC 4-010-01 performance requirements for High Level of Protection and GSA Level D blast loading
- ATEX certified for use in explosive atmospheres. Ambient temperature up to 195°C
- AMCA certified for pressure drop performance

Standard Construction

- Carbon steel with zinc rich gray primer
- HSLA steel axles
- Stainless steel springs for blade retention
- Multi-section construction for larger openings

Mounting

- Surface mounted to exterior walls and roof structures (concrete or steel)
- Duct mounted

Options

- Debris grid on front face
- Stainless steel construction
- Galvanized construction

BL-201 Series Blast Damper Test Results*

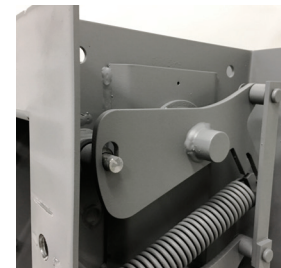
All tests performed on 32"W x 32"H (812mm x 812mm) dampers. Test No's 2 thru 6 performed on the same damper.

Test	Test Specimen	Applied Peak Pressure (psi)	Applied Impulse (psi-ms)	Damper Closing Time (ms)	Response Description
1	1	16.3	1477	11	Damper remained operable Damper blade had 1/8" permanent deflection
2	2	3.2	128	30	Damper remained operable No damage caused in test
3	2	5.8	229	20	Damper remained operable No damage caused in test
4	2	8.7	370	17	Damper remained operable No damage caused in test
5	2	11.1	753	16	Damper remained operable No damage caused in test
6	2	16.2	1439	12	Damper remained operable No damage caused in test

*Testing performed by Baker Risk Engineering & Risk Consultants.

Blade Lock Feature

The blade lock feature holds damper closed and protects against subsequent negative pressure phase and moving flame fronts.



Choose Protection & Relief in One Package

BL-201 Series Blast Damper & BD-200-HD Pressure Relief Damper

M.A.T.'s blast damper/pressure relief damper combination provides blast protection and effective pressure relief for fire suppression systems. The damper package also improves blast pressure impulse capture, thereby decreasing pass through leakage.

The assembly consists of:

- ATEX certified blast damper
- 2 hr fire resistant rated pressure relief damper with debris grid
- A sleeve to connect both dampers (as necessary, depending on wall thickness and counterbalance method)
- Optional blast-side debris grid

